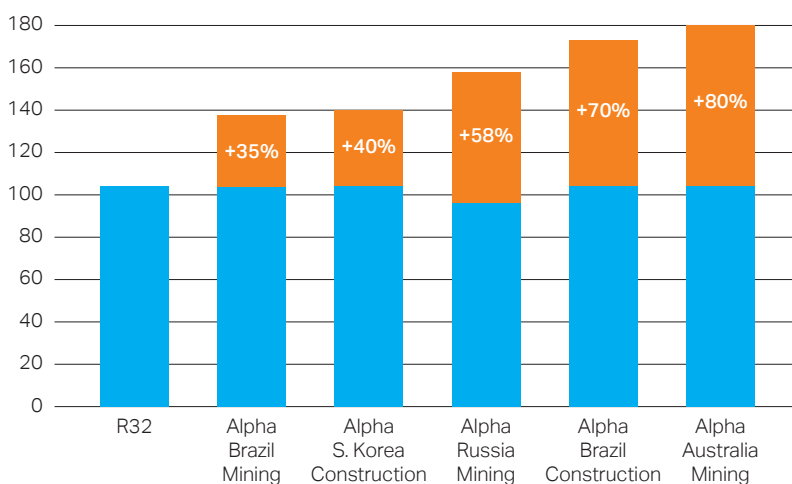


WHAT THE ALPHA 330 SYSTEM USERS ARE SAYING

After using the **Sandvik Alpha 330 tool system**, customers in mining and construction applications all over the world have identified the following advantages:

- Extended rod life, at least 30%
- Longer shank adapter life
- Longer coupling life



Combined, these features **reduce total drilling tool cost by 20%**.
And, on top of that:

- High penetration rate
- Advanced precision in collaring
- Superior hole accuracy
- Faster and easier uncoupling of bits
- Reduced machine downtime

TRUSTED PERFORMANCE AND SPEED THAT KEEPS YOU ON SCHEDULE.





SPEED UP YOUR TUNNELING PROJECT WITH ALPHA 330

- New short thread design result in a rigid, integrated drill string optimized for 43 to 51 mm drilling.
- The new short thread design offers increased precision in collaring.
- The rigid drill string results in straighter holes, permitting optimum drilling patterns, better hole accuracy and higher rates of advance.
- Exact collaring and straighter holes are prerequisites for productive drilling with less over break and lower overall costs.
- Less downtime of machinery resulting in better scheduling through optimal productivity.



A BREAKTHROUGH FOR STRAIGHT DRILLING

THE ALL-NEW SANDVIK ALPHA 330



THE ALPHA 330 GOES FROM STRENGTH TO STRENGTH



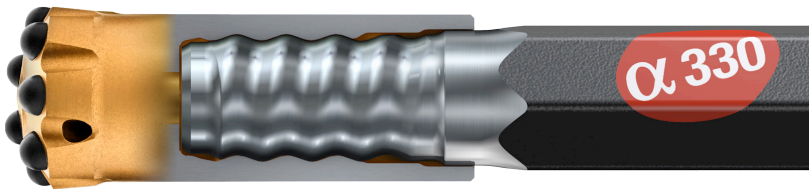
Today's rock drills generate almost unlimited impact power. We need to control that power and, most importantly, ensure that it is transmitted into the rock as efficiently, accurately and economically possible. That is the job of the rock drilling tools, which is why we continue to develop the Alpha 330 tool system – to bring the best solution for performance and productivity.

The drill string rod/bit connection features an entirely new thread design and the rod itself is, with a T38 thread at the shank end.

The rod's new short thread design results in a rigid, integrated power pack drill string. A superior resistance to bending stresses along with improved bit guidance results in a perfect energy transfer. The sturdy thread is well guided inside the bit skirt, offering high precision in collaring – even in complex rock formations and against uneven surfaces.

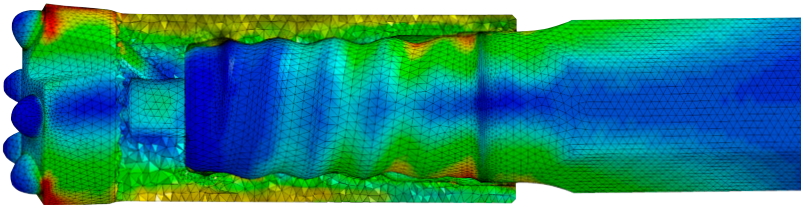
REVOLUTIONARY SHORTER THREAD KEY FOR GREATER STRESS REDUCTION

A snug interface at this crucial point at the rear of the connection greatly improves the rigidity of the joint. The bit skirt covers the thread completely in the Alpha 330 connection, no part of the thread itself is exposed to sandblasting, reducing the risk of corrosion-fatigue.



To match the increased energy output from modern high-power rock drills in tunneling, the new Alpha 330 has been designed and dimensionally optimized to replace R32 connections (also a Sandvik innovation) which has been the dominant Ø 45 mm system to date.

Using advanced **FEM programs** we are able to simulate the application of our designs long before the solution touches the rock.

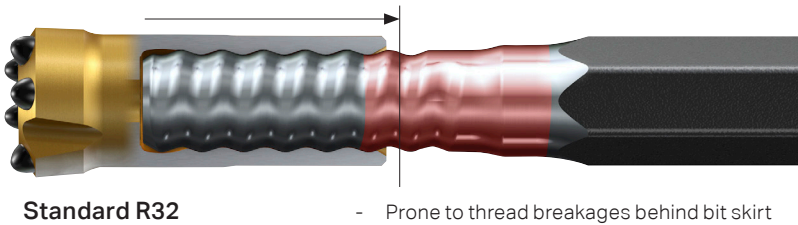
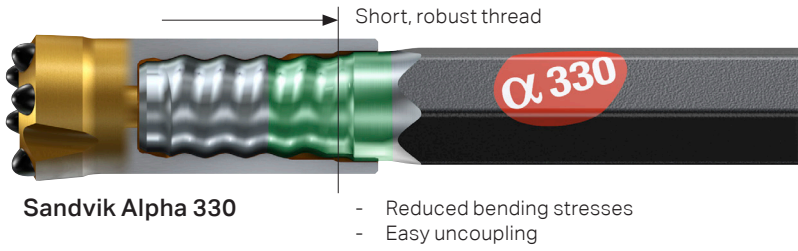


Advanced analysis have been used to simulate and locate critical bending stresses of various designs to arrive at an optimally dimensioned rod/bit connection.

To match the increased energy output from modern high-power rock drills in tunneling, Sandvik brings further developments to the Alpha 330 – delivering more-accurately collared, straighter holes, higher penetration rates and 30 to 80 per cent more rod life.

NEW DESIGN FOR LOWER COSTS PER DRILL METER

Thread length and diameter means more steel and at least 30 % better service life when compared to R32.



More steel for higher fatigue strength makes the connection rigid compared to the R32 to give exact collaring and straighter holes.

